

Cancel claim 11 without prejudice.

Add the following new claims:

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12. (new) Method according to claim 1, characterized in that both enzymatic reactions are carried out in the same reaction medium containing HPP, the two suitable enzymes being present together at the same time in the reaction medium.

13. (new) Method according to claim 1, characterized in that the two suitable enzymes are introduced into the suitable reaction medium in the form of protein extracts, or alternatively they can be produced in situ by suitable biological organisms.

REMARKS

Claims 1-8 and 11 are pending in the application. Claim 1 has been amended. Claim 11 has been canceled without prejudice. New claims 12 and 13 have been added. The amendments and added claims were previously submitted on August 16, 2002 in Applicants' response to the Office Action mailed May 21, 2002, but were not entered. In the Advisory Action mailed September 13, 2002, the Examiner indicated that the amendments and new claims raise new issues, including new issues relating to multiple dependency. The claim amendments and new claims are the same as previously submitted, except that new claims 12 and 13 depend from claim 1 instead of having multiple dependency format.

As indicated in Applicants' response to the Office Action mailed May 21, 2002, the amendments to claim 1 delete the phrase "in a plant cell modified to produce a first suitable enzyme ... converts HPA into HMO", placing claim 1 in the form originally filed, and add the limitation of claim 11 that the method is carried out in the presence of an HPPD inhibitor in the suitable reaction medium.

New claims 12 and 13 are identical (except for dependency) to originally filed claims 9 and 10, respectively, that were canceled without prejudice in Applicants' response to the Office Action mailed October 26, 2001.

Claim 1, as presently amended, is not anticipated or rendered obvious by any of the references cited against the claims in the Office Action mailed October 26, 2001. Amended

claim 1 is drawn to a method for enzymatic preparation of homogentetic acid (HMO) from 4-hydroxypyruvate (HPP), which is carried out in a suitable reaction medium that contains an HPPD inhibitor. None of the previously cited references, alone or in combination, discloses or suggests the claimed method of producing homogentisate wherein an HPPD inhibitor is present in the reaction medium. Claims 2-8, 12 and 13 depend from claim 1 and are also not anticipated or rendered obvious for the same reasons.

Also as discussed in Applicants' response to the Office Action mailed May 21, 2002, HPPD inhibitors are discussed in the specification at pages 1-2. HPPD refers to 4-hydroxyphenylpyruvate dioxygenase. Inhibitors of this enzyme are herbicidal compounds that block the production of HMO in plant cells. The HPPD inhibitor 4-[4-trifluoromethyl-2-(methylsulfonyl)benzoyl]-5-cyclopropylisoxazole is disclosed in Examples 1 and 2. The specification at page 4 indicates that the enzymes employed in the methods of the invention are insensitive to HPPD inhibitors and the method of the invention can be performed in the presence of an HPPD inhibitor in the suitable reaction medium.

An early and favorable Office Action is requested.

Respectfully submitted,
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Appendix A

Marked up amended claims

1. (twice amended) Method for enzymatic preparation of homogentisate (HMO) from 4-hydroxypyruvate (HPP), characterized in that it consists in carrying out [in a plant cell modified to produce a first suitable enzyme that converts HPP to 4-hydroxyphenylacetate (HPA) and a second suitable enzyme that converts HPA into HMO], in a suitable reaction medium, the following enzymatic reactions:
 - enzymatic conversion of HPP into 4-hydroxyphenylacetate (HPA) [HPA] with a first suitable enzyme, then
 - enzymatic conversion of HPA into HMO with a second suitable enzyme, wherein said method is carried out in the presence of a 4-hydroxyphenylpyruvate dioxygenase (HPPD) inhibitor in said suitable reaction mixture.